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EXAMINER	
SHOSHO, CALLIE E	

ART UNIT	PAPER NUMBER
1714	7

DATE MAILED: 10/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/781,453

Applicant(s)

NAKAGAWA ET AL.

Examiner

Callie E. Shosho

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 6/25/02. Further, the double patenting rejections of record are overcome in light of applicants' filing of terminal disclaimer on 6/25/02.

The following rejection is non-final in light of the use of a new reference against the present claims, namely JP 54120656, whose English translation was previously not available.

Additionally, it is noted that while applicants clarified the change set forth in the preliminary amendment, given that the preliminary amendment was incorrect and thus, previously not entered, applicants must again request the change to page 11, line 6 in the form of an amendment in order for the change to be made.

**Claim Rejections - 35 USC § 103**

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 3-5, and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 716121 in view of Sadatoshi et al. (U.S. 5,340,878) and either Yamamoto et al. (U.S. 5,656,696) or JP 54120656.

EP 716121 discloses a composition comprising 5-95% propylene/1-butene random copolymer which is characterized in that the copolymer contains (i) 50-95 mol% propylene and 5-50 mol% 1-butene, (ii) molecular weight distribution  $M_w/M_n$  of not more than 3, (iii) B value of 1-1.5, (iv) melting point of 60-140 °C wherein the melting point satisfies the relationship

$-2.6M + 130 < T_m < -2.3M + 155$  where M is the mol% of 1-butene present in the copolymer, and (v) degree of crystallinity measured by x-ray diffractometry of satisfying the relationship  $C > -1.5M + 75$  where M is the mol% of 1-butene present in the copolymer. The propylene/1-butene copolymer is obtained by copolymerizing propylene and 1-butene in the presence of olefin polymerization catalyst wherein the catalyst comprises transition metal compound identical to that presently claimed and an organoaluminum oxy compound and/or a compound capable of reacting with transition metal compound to form an ion pair. The composition also comprises additives such as inorganic filler, antioxidant, antistatic agent, lubricant, UV absorber, etc. There is also disclosed a composite film comprising a substrate layer and laminated onto one side a resin layer obtained from the above composition wherein the resin layer has thickness of 0.1-50  $\mu\text{m}$  (page 2, lines 28-31 and 33-36, page 2, line 40-page 3, line 35, page 3, lines 42 and 45-46, page 4, lines 46-47 and 54-58, page 5, lines 1-32, page 9, line 7-page 10, line 58, page 18, lines 16-17 and 26-29, page 21, line 37, page 22, lines 19-25, and page 24, lines 20-22).

The difference between EP 716121 and the present claimed invention is the requirement in the claims of (a) melt flow rate of propylene/1-butene copolymer and (b) low-density polyethylene.

With respect to difference (a), EP 716121 is silent with respect to the melt flow rate of the propylene/1-butene copolymer.

Sadatoshi et al., which is drawn to composition comprising propylene/1-butene copolymer and ethylene/ $\alpha$ -olefin copolymer, disclose the use of propylene/1-butene copolymer having melt flow rate of 3-50 g/10min in order to produce a copolymer which has suitable

transparency and workability wherein the melt flow rate is measured according to JIS K7210 (col.2, lines 41-44, 51-53, and 55-56 and col.4, lines 45-48). It is noted, as found in state-of-the-art references such as Nohara et al. (U.S. 5,891,946), that JIS K7210 standard is equivalent to ASTM D 1238 standard as presently claimed (col. 12, lines 28-31).

With respect to difference (b), EP 716121 discloses the use of polyethylene, however, there is no explicit disclosure of low-density polyethylene as presently claimed.

Yamamoto et al., which is drawn to resin composition, disclose the use of 1-50% high-pressure low-density polyethylene which has melt flow rate of 10-50 g/10 min according to JIS K7210 at 190 °C and 2.16 kg and density of 0.918-0.927 g/cm<sup>3</sup> wherein such polyethylene is used in order to produce a composition with good moldability, excellent transparency and excellent impact strength (col.1, lines 57-63 and col.6, lines 20-53). It is noted, as found in state-of-the-art references such as Nohara et al. (U.S. 5,891,946), that JIS K7210 standard is equivalent to ASTM D 1238 standard as presently claimed (col. 12, lines 28-31).

Alternatively, JP 54120656, an English translation of which is included in this office action, which is drawn to composition comprising propylene/1-butene, disclose the use of low density polyethylene which has melt flow rate of 1-40 g/10 min (measured in accordance with ASTM D-1238) and density of less than 0.94 g/cm<sup>3</sup> or preferably 0.915-0.93 g/cm<sup>3</sup>, in order to produce composition with excellent heat, wear, and scratch resistance as well as good workability time of lamination (paragraph bridging pages 4-5 and page 5, second full paragraph).

In light of the motivation for using propylene/1-butene copolymer with specific melt flow rate disclosed by Sadatoshi et al. and the motivation for using low-density polyethylene disclosed by either Yamamoto et al. or JP 54120656 as described above, it therefore would have been

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obvious to one of ordinary skill in the art to use such propylene/1-butene and low-density polyethylene in the composition of EP 716121 in order to produce a composition with good transparency and workability, as well as good moldability and impact strength or alternatively, excellent heat, wear, and scratch resistance and thereby arrive at the claimed invention.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 716121 in view of Sadatoshi et al. and either Yamamoto et al. or JP 54120656 as applied to claims 1, 3-5, and 7-9 above, and further in view of Yoshimura et al. (U.S. 5,443,765).

The difference between EP 716121 in view of Sadatoshi et al. and either Yamamoto et al. or JP 54120656 and the present claimed invention is the requirement in the claims of specific type low-density polyethylene.

Yoshimura et al., which is drawn to composite film, disclose the use of low-density ethylene/C<sub>3</sub>-C<sub>12</sub>  $\alpha$ -olefin copolymer which has melt flow rate of 0.2-15 g/10 min measured using ASTM D 1238 conditions and density of 0.89-0.935 g/cm<sup>3</sup>. The motivation for using such polyethylene is due to its excellent stretchability, softness, and strength (col.11, lines 20-21, 25, and 57, col.12, lines 3-16, and col.32, line 22).

In light of the motivation for using specific high-pressure low-density polyethylene disclosed by Yoshimura et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such polyethylene in the composition of EP 716121 in order to produce a composition with excellent stretchability, softness, and strength, and thereby arrive at the claimed invention.

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5. Claims 1, 3, 5, and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugano et al. (U.S. 5,468,781) in view of EP 716121 and either Yamamoto et al. (U.S. 5,656,696) or JP 54120656.

Sugano et al. disclose composition comprising 100 parts propylene/1-butene random copolymer which comprises 0.1-25% 1-butene and possesses melt flow rate measured using ATSM D 1238 at 230 °C and 2.16 kg of 0.1-50 g/10 min, 1-50 parts high-pressure low-density polyethylene, and less than 5 parts additives such as antioxidant, antistatic agent, and UV absorber. Based on the above amounts, it is calculated that the composition comprises approximately 67-99% (100/150-100/101) propylene/1-butene and 0.99-33% (1/101-50/150) high-pressure low-density polyethylene. The propylene/1-butene copolymer is obtained by copolymerizing propylene and 1-butene in the presence of olefin polymerization catalyst comprising transition metal compound identical to that presently claimed such as dimethyl silylene bis(2-methyl-4-phenylindenyl) zirconium chloride and compound such as alumoxane or Lewis acid which is capable of reacting with the transition metal compound to form an ion pair (col.2, line 50-col.3, line 28, col.3, lines 48-49, col.5, lines 4-10 and 24-28, col.5, line 66-col.6, line 3, and col.6, lines 13 and 21-23).

The difference between Sugano et al. and present claimed invention is the requirement in the claims of (a) molecular weight distribution, B value, melting point, and crystallinity of propylene/1-butene copolymer, (b) density and melt flow rate of low-density polyethylene, and (c) filler.

With respect to difference (a), EP 716121, which is drawn to polypropylene composition, disclose the use of propylene/1-butene random copolymer characterized in that the copolymer

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has (i) molecular weight distribution  $M_w/M_n$  of not more than 3, (ii) B value of 1-1.5, (iii) melting point of 60-140 °C wherein the melting point satisfies the relationship  $-2.6M + 130 < T_m < -2.3M + 155$  where M is the mol% of 1-butene present in the copolymer, and (iv) degree of crystallinity measured by x-ray diffractometry of satisfying the relationship  $C > -1.5M + 75$  where M is the mol% of 1-butene present in the copolymer. The motivation for using such copolymer is to produce a composition excellent in heat resistance and low temperature sealing properties as well as flexibility and impact resistance (col.2, lines 4-7, col.4, lines 54-58, and col.5, lines 1-5 and 18-31).

With respect to difference (b), Yamamoto et al., which is drawn to resin composition, disclose the use of high-pressure low-density polyethylene which has melt flow rate of 10-50 g/10 min according to JIS K7210 at 190 °C and 2.16 kg wherein if the melt flow rate is too high, the impact strength is impaired while if the melt flow rate is too low, the spiral flow is impaired and density of 0.918-0.927 g/cm<sup>3</sup> wherein if the density is too high, the transparence is impaired and if the density is too low, blocking occurs (col.6, lines 20-53). It is noted, as found in state-of-the-art references such as Nohara et al. (U.S. 5,891,946), that JIS K7210 standard is equivalent to ASTM D 1238 standard as presently claimed (col. 12, lines 28-31).

Alternatively, JP 54120656, an English translation of which is included in this office action, which is drawn to composition comprising propylene/1-butene, disclose the use of low density polyethylene which has melt flow rate of 1-40 g/10 min (measured in accordance with ASTM D-1238) and density of less than 0.94 g/cm<sup>3</sup> or preferably 0.915-0.93 g/cm<sup>3</sup>, in order to produce composition with excellent heat, wear, and scratch resistance as well as good workability time of lamination (paragraph bridging pages 4-5 and page 5, second full paragraph).



In light of the motivation for using specific propylene/1-butene copolymer and high-pressure low-density polyethylene disclosed by EP 716121 and either Yamamoto et al. or JP 54120656, respectively, it therefore would have been obvious to one of ordinary skill in the art to use such specific propylene/1-butene copolymer and low-density polyethylene in the composition of Sugano et al. in order to produce a composition with excellent in heat resistance, low temperature sealing properties, flexibility and impact resistance as well as good impact strength, spiral flow, transparency, and anti-blocking resistance or alternatively, excellent heat, wear, and scratch resistance, and thereby arrive at the claimed invention.

With respect to difference (c), EP 716121 discloses the use of inorganic filler in order to produce a composition that is excellent in weld strength, paintability, and molding processability (col.21, line 37-col.22, line 4).

In light of the motivation for using inorganic filler disclosed by EP 713121 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such filler in the composition of Sugano et al. in order to produce a composition with excellent weld strength, paintability, and molding processability, and thereby arrive at the claimed invention.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugano et al. in view of EP 716121 and either Yamamoto et al. or JP 54120656 as applied to claims 1, 3, 5, and 7-8 above, and further in view of Yoshimura et al. (U.S. 5,443,765).

The difference between Sugano et al. in view of EP 716121 and either Yamamoto et al. or JP 54120656 and the present claimed invention is the requirement in the claims of specific type of low-density polyethylene.

Yoshimura et al., which is drawn to composite film, disclose the use of high-pressure low-density ethylene/ $C_3$ - $C_{12}$   $\alpha$ -olefin copolymer which has melt flow rate of 0.2-15 g/10 min measured using ASTM D 1238 conditions and density of 0.89-0.935 g/cm<sup>3</sup>. The motivation for using such polyethylene is due to its excellent stretchability, softness, and strength (col.11, lines 20-21, 25, and 57, col.12, lines 3-16, and col.32, line 22).

In light of the motivation for using specific low-density polyethylene disclosed by Yoshimura et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such polyethylene in the composition of Sugano et al. in order to produce a composition with excellent stretchability, softness, and strength, and thereby arrive at the claimed invention.

7. Claims 1, 4-5, and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 54120656 in view of EP 716121.

JP 54120656 discloses a composition comprising 50-97 parts propylene/1-butene random copolymer which is characterized in that the copolymer contains (i) 55-85 mol% propylene and 15-45 mol% 1-butene, (ii) melting point of 80-130 °C, and (iii) melt flow rate of 0.1-40 g/10 min (measured in accordance with ASTM D-1238) and 3-50 parts low density polyethylene which has melt flow rate of 1-30 g/10 min and density of less than 0.94 g/cm<sup>3</sup> or preferably 0.915-0.93 g/cm<sup>3</sup>. JP 54120656 also discloses the use of ethylene/  $\alpha$ -olefin copolymer wherein the  $\alpha$ -olefins include propylene, butene, pentene, hexane, and 4-methyl-1-pentene. The composition also comprises additives such as pigment, dye, nucleating agent, and UV absorber. There is also disclosed a composite film comprising a substrate layer and laminated onto one side a resin layer

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obtained from the above composition wherein the resin layer has thickness of 2-200  $\mu\text{m}$  (page 3, third and fourth full paragraphs and second and third lines from the bottom, paragraph bridging pages 4-5, page 5, first and second full paragraphs, paragraph bridging pages 5-6, and page 6, second full paragraph). Although there is no disclosure in JP 54120656 of relationship between melting point of propylene/1-butene copolymer and amount of butene as presently claimed, given that JP 54120656 discloses propylene-1-butene with melting point and amount of butene as presently claimed, it is clear what the melting would intrinsically satisfy the relationship as presently claimed.

The difference between EP 716121 and the present claimed invention is the requirement in the claims of (a) molecular weight distribution, B value, and crystallinity of propylene/1-butene copolymer, and (b) filler.

With respect to difference (a), EP 716121, which is drawn to polypropylene composition, disclose the use of propylene/1-butene random copolymer characterized in that the copolymer has (i) molecular weight distribution  $M_w/M_n$  of not more than 3, (ii) B value of 1-1.5, and (iii) degree of crystallinity measured by x-ray diffractometry of satisfying the relationship  $C > -1.5M + 75$  where M is the mol% of 1-butene present in the copolymer. The motivation for using such copolymer is to produce a composition excellent in heat resistance and low temperature sealing properties as well as flexibility and impact resistance (col.2, lines 4-7, col.4, lines 54-58, and col.5, lines 1-5 and 18-31).

In light of the motivation for using specific propylene/1-butene copolymer disclosed by EP 716121 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such specific propylene/1-butene copolymer in the composition of JP 54120656 in

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order to produce a composition with excellent heat resistance, low temperature sealing properties, flexibility and impact resistance, and thereby arrive at the claimed invention.

With respect to difference (b), EP 716121 discloses the use of inorganic filler in order to produce a composition that is excellent in weld strength, paintability, and molding processability (col.21, line 37-col.22, line 4).

In light of the motivation for using inorganic filler disclosed by EP 716121 as described above, it therefore would have been obvious to one of ordinary skill in the art to use such filler in the composition of JP 54120656 in order to produce a composition with excellent weld strength, paintability, and molding processability, and thereby arrive at the claimed invention.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 54120656 in view of EP 716121 as applied to claims 1-2, 4-5, and 7-9 above, and further in view of Yoshimura et al. (U.S. 5,443,765).

The difference between JP 54120656 in view of EP 716121 and the present claimed invention is the requirement in the claims of specific type of low-density polyethylene.

JP 54120656 disclose the use of ethylene/ $\alpha$ -olefin copolymers identical to those presently claimed (page 5), but do not disclose the melt flow rate or density of such copolymers.

Yoshimura et al., which is drawn to composite film, disclose the use of low-density ethylene/ $C_3$ - $C_{12}$   $\alpha$ -olefin copolymer which has melt flow rate of 0.2-15 g/10 min measured using ASTM D 1238 conditions and density of 0.89-0.935 g/cm<sup>3</sup>. The motivation for using such polyethylene is due to its excellent stretchability, softness, and strength (col.11, lines 20-21, 25, and 57, col.12, lines 3-16, and col.32, line 22).

In light of the motivation for using specific low-density polyethylene disclosed by Yoshimura et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such polyethylene in the composition of JP 54120656 in order to produce a composition with excellent stretchability, softness, and strength, and thereby arrive at the claimed invention.

**Response to Arguments**

9. Applicants' arguments filed 6/25/02 have been fully considered but they are not persuasive.

Specifically, applicants' argue that:

(a) there is no motivation to combine EP 716121 with Sadatoshi et al. given that Sadatoshi et al. do not use metallocene catalyst as presently claimed and further given that Sadatoshi et al. disclose ratio of  $M_w/M_n$  and amount of crystalline ethylene polymer outside the scope of the present claims.

(b) There is no motivation to use Yamamoto et al. given that Yamamoto et al. do not disclose propylene/1-butene copolymer as presently claimed and further given that Yamamoto et al. is non-analogous art.

(c) Yoshimura et al. only disclose limited number of ethylene/ $\alpha$ -olefin copolymers.

(d) There is no motivation to combine Sugano et al. with EP 716121 given that EP 716121 does not disclose melt flow rate or low density polyethylene as presently claimed.

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With respect to argument (a), firstly, it is noted that only present claim 3 requires that the propylene/1-butene copolymer is polymerized in the presence of a metallocene catalyst. Further, it is noted that Sadatoshi et al. is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely the melt flow rate of propylene/1-butene, and in combination with the primary reference, discloses the presently claimed invention. It is noted that as set forth by applicants' own comparative data as found on page 38 of the present specification, the use of Ziegler-Natta catalyst as utilized in Sadatoshi et al. as opposed to metallocene catalyst as utilized in the present invention does not affect the melt flow rate of the propylene/1-butene copolymer.

With respect to the ratio of  $M_w/M_n$ , it is noted that while example 1 does disclose ratio outside the scope of the claims, it is also significant to note that example 4 (Table 3) of Sadatoshi et al. disclose ratio of  $M_w/M_n$  of 3 which falls within the scope of the present claims. Further, while Sadatoshi et al. do disclose amount of crystalline ethylene polymer, i.e. 3.8%, outside the scope of the present claims, i.e. 4%, as described above, Sadatoshi et al. is used as a teaching reference and therefore it is not necessary for his reference to contain all the features of the presently claimed invention. Additionally, it is noted that the instantly claimed amount of polyethylene and that taught by Sadatoshi et al. are so close to each other that the fact pattern is similar to the one in *In re Woodruff*, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims

patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties". In light of the case law and given that there is only a "slight" difference between the amount of polyethylene disclosed by Sadatoshi et al. and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of polyethylene disclosed in the present claims is but an obvious variant of the amounts disclosed in Sadatoshi et al.

With respect to difference (b), applicants argue that Yamamoto et al is non-analogous art given that Yamamoto et al. is drawn to composition used for injection molding while present claims are drawn to composition used for composite film.

However, firstly, it is noted that only present claim 4 is drawn to a composite film, the remaining claims are drawn to composition. Further, according to MPEP 2141.01 (a), a reference may be relied on as a basis for rejection of an applicants' invention if it is "reasonably pertinent to the particular problem with which the inventor is concerned." A reasonably pertinent reference is further described as one which "even though it maybe in a different field of endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." Yamamoto et al. is, therefore, a reasonably pertinent reference, because it teaches that using specific type of low-density polyethylene produces a composition with good moldability, excellent transparency, and excellent impact strength, which are functions especially pertinent to the invention at hand.

Applicants also argue that Yamamoto et al. does not disclose propylene/1-butene copolymer as presently claimed, however as stated with respect to argument (a) above, given that Yamamoto et al. is used as a teaching reference, it is not necessary for his reference to contain all the features of the presently claimed invention.

With respect to argument (c), it is noted that Yoshimura et al. disclose the use of low-density ethylene/C<sub>3</sub>-C<sub>12</sub>  $\alpha$ -olefin copolymer. While the  $\alpha$ -olefins disclosed do not encompass every type presently claimed, this disclosure still meets the limitations of claim 6 which requires only "at least one"  $\alpha$ -olefin. Even if Yoshimura et al. only disclosed one type of  $\alpha$ -olefin that would be enough to reject the claim.

With respect to argument (d), as stated with respect to argument (a) above, given that EP 716121 is used as a teaching reference, it is not necessary for his reference to contain all the features of the presently claimed invention. Rather, EP 716121 is used to teach a certain concept, namely properties associated with propylene/1-butene copolymer, and in combination with Sugano et al. discloses the claimed invention.

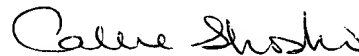
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho  
Examiner  
Art Unit 1714

CS  
October 9, 2002